States found it difficult to bring together the different cultures of hospital medicine and primary care, 5 with the exception of long established integrated delivery systems such as Kaiser Permanente.

#### Will it work?

In the NHS of the future, district general hospitals will compete with other NHS hospitals, NHS treatment centres, independent sector treatment centres, and established private hospitals. Planned care, outpatient services, and diagnostic facilities will be available in a range of settings, and primary care providers will develop alternatives to hospital for unplanned care. The services available at most district general hospitals will be more limited than in the past, with the public using other providers for some forms of treatment, both routine and specialist.

On an optimistic reading, it is possible to envisage enhanced primary care facilities and independent sector providers acting as a one stop shop for most forms of care apart from hospital inpatient services. Under this scenario, reductions in the services provided by district general hospitals will be more than compensated for by the provision of a wider range of services outside hospital and by increasing patient choice of providers. Whether the incentives are strong enough for a sufficient number of general practitioners to respond to this challenge is one of the major uncertainties facing government.

On a pessimistic reading, the changes could result in reduced access to services and ultimately hospital closures. Lack of co-ordination between different providers may lead to the withdrawal of essential services in some localities. In view of the iconic status of hospitals in the eyes of the public, government risks huge unpopularity in dealing with the consequences. The decision to commission work on market exit strategies, and to contemplate the possibility of hospital closures, indicates that the new secretary of state for health is preparing for this eventuality. Whether the deliber-

#### **Summary points**

Increased patient choice about where to be treated and a bigger role for the independent sector will create competition between providers

Independent sector providers will concentrate on simpler, elective treatments and diagnosis

Practice based commissioning will lead to some outpatient and other services being provided outside hospitals

Payment by results will increase efficiency but could lead to some hospital services becoming uneconomic

District general hospitals may find it difficult to sustain a full range of services and could be left providing expensive complex care

Managing the effects of choice and competition represents a huge political challenge

ately destabilising effects of current changes can be managed effectively must be doubted.

Contributors and sources: CH works closely with NHS organisations on the implementation of the government's planned market reforms. He was previously director of the strategy unit in the Department of Health. He has researched and advised on healthcare reform in a number of countries.

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# Obesity, hunger, and agriculture: the damaging role of subsidies

Liselotte Schäfer Elinder

Globally, we are producing more food than the population needs. Subsidising overproduction in Europe is affecting the health of people in both Africa and Europe

Being overweight is becoming the norm rather than the exception in most developed countries, and obesity is a serious health problem worldwide. Many people see obesity as a lifestyle issue. However, behavioural interventions to prevent obesity in both adults and children have generally been ineffective, indicating strong influences beyond individual control. Considerable resources are currently invested in developing drugs to prevent and treat obesity. However, from a

societal perspective, prevention of obesity through diet and physical activity should be given priority for both economic and ethical reasons.<sup>13</sup> Chopra and Darnton-Hill recently suggested that we need a global strategy on food similar to the Framework Convention on Tobacco Control.<sup>4</sup> Their suggested actions are mainly aimed at reducing demand for food. But we argue it is equally important to tackle the oversupply of food, driven by agricultural subsidies.

Swedish National Institute of Public Health, 103 52 Stockholm, Sweden Liselotte Schäfer Elinder associate professor

Correspondence to: L Schäfer Elinder liselotte.elinder@fhi.se

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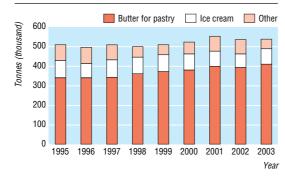


Fig 1 Quantities of European Union butter receiving consumption aid from 1995 to 2003.13

#### European common agricultural policy

The societal changes causing the worldwide increase in body mass index include mass production of heavily marketed, energy dense foods, globalisation of trade and taste, technological developments in the workplace, a sedentary lifestyle, and the reduction in active transport.<sup>5 6</sup> Improvements in agricultural productivity over the past decades have facilitated a massive increase in dietary energy intake.

Actually, the main problem for the agricultural sector in many developed countries is overproduction.<sup>7</sup> Several studies have suggested that overproduction of food followed by excessive consumption is the prime cause of the increase in body mass index in the United States and elsewhere.<sup>8 9</sup> Continued subsidy to stimulate production of food through agricultural policy is therefore paradoxical. Obesity and associated noncommunicable diseases cause costs for health care and lost productivity, and overproduction in agriculture causes environmental degradation. But these negative effects are difficult to influence through behavioural intervention because consumers do not bear the full costs. The World Health Organization has noted this problem, and its global strategy on diet, physical activity, and health recommends that "Member states need to take healthy nutrition into account in their agricultural policies."10

The dairy sector in the European Union is an example of how agriculture subsidies can lead to negative health effects in Europe as well as in developing countries. The European Union spends almost €2bn (£1.4bn, \$2.4bn) a year to maintain production levels at 20% above the domestic demand and at prices twice as high as on the world market. Without subsidies, production would quickly adapt to the level of demand. However, for historical reasons, and because of strong lobbying, milk production in the European Union is highly protected.

Surplus milk is converted to the storable products skimmed milk powder and butter. Butter mountains are expensive to maintain and create negative publicity. Therefore, export subsidies and domestic consumption aids are granted in order to dispose of it. Export subsidies for milk products undermine the milk sector in many developing countries such as the Dominican Republic, Kenya, India, and Jamaica. Domestic consumption aid for butter at a yearly cost of €500m is granted to one third of all butter produced in the European Union, corresponding to 1.5 kg of butter per

European citizen a year. This butter is sold with subsidies to the food industry, which turns it into mainly ice cream and cakes (fig 1). <sup>13</sup>

The European school milk scheme is another outlet of surplus milk.<sup>11</sup> Higher subsidies given to milk with a higher fat content has led to only 5% of Swedish school children drinking the recommended skimmed milk with their school lunches (Swedish National Food Administration, unpublished figures). In theory, a child who drinks full fat milk instead of skimmed milk receives an extra 1.5 kg of saturated fat each year from school milk alone.

## Increasing dietary energy supplies worldwide

Figures from the Food and Agriculture Organization show that global per capita dietary energy supplies are rising and forecasted to grow for at least another 25 years (fig 2).14 A decreasing global population growth rate in combination with a strong growth in agricultural productivity has given us access to more and better food at declining real prices, in fact the lowest in history. People around the world can purchase more calories today for the same money as western Europeans could decades ago at a similar gross domestic product level. This is, of course, positive for the 850 million people who still suffer from hunger and malnutrition worldwide. However, the main reason for hunger is not a lack of global food supplies but lack of access to food, conflicts, natural and human disasters, animal and plant pests, and unfair international trade in combination with a lack of political will to eradicate it.15

A daily energy intake of 9.2 MJ (2200 kcal) is regarded as necessary to avoid malnutrition, while more than 11.3-12.5 MJ a day will lead to obesity in people with a sedentary lifestyle.<sup>15</sup> Income inequalities, the level of poverty and health care, and the fact that obesity shifts from the rich to the poor as income rises will determine the socio-epidemiological distribution of malnutrition, obesity, and non-communicable diseases in each country.<sup>16</sup>

In a climate of tough competition, sections of the food industry develop new and healthier value added foods at higher prices, benefiting mainly higher socio-

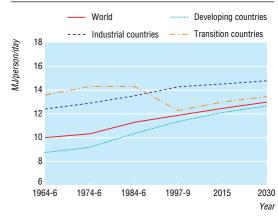


Fig 2 Development of per capita dietary energy supply from 1964 until 2030<sup>14</sup>

economic groups. But what is produced is eventually eaten by someone. Fat, sugar, and cereals are cheap and constitute the raw materials for energy dense and nutrient poor foods, which lead to passive overeating and obesity.<sup>5</sup> <sup>17-19</sup> Therefore, as long as the supply of energy dense foods is not reduced, the prevalence of obesity and social inequalities in health is likely to continue to increase. As a first step to reverse the obesity epidemic, agricultural market support promoting the overproduction of food has to be phased out.

The overproduction of food by developed countries also has detrimental health effects in other countries. The use of export subsidies by rich countries and tariffs on imported food is a serious obstacle for growth of the agricultural sector in developing countries. The agricultural growth has an important role in alleviating poverty and malnutrition because it increases food availability locally, creates employment, stimulates the rural economy, and reduces the cost of food for poor consumers. According to the Food and Agriculture Organization, rural development and agriculture are key to reducing poverty and hunger and reaching the millennium development goals.

#### Agricultural subsidies coupled to production should be phased out

The 2003 reform of the common agricultural policy, the main aim of which was to bring supply in line with demand, was a step in the right direction. It partially decoupled financial support from the amount of foods produced. However, the results of quantitative analysis by the Organisation for Economic Cooperation and Development indicate only modest (less than 1%) reductions in production of most commodities such as wheat, coarse grains, oilseeds, beef, pig meat, and poultry.21 Only rice production is expected to decrease significantly. Milk production in the European Union is expected to increase slightly until 2014-5 because of increases in the quota (the amount of milk eligible for subsidies). There are consequently no plans to phase out consumption aid for butter (Swedish Board of Agriculture, personal communication). Subsidised export is assumed to decrease by 4% for wheat, 6% for cheese, 8% for skimmed milk powder, and 17% for butter. This will result in falling prices on the European market and more energy available for consumption. Economists expect European consumption of butter to increase by 0.7%, cheese by 1.5%, and wheat by 0.3% by 2008. In other words, it is assumed that the population will contribute to solving the problems of the common agricultural policy by eating more. Clearly, the policy reform is a failure from the perspective of preventing obesity.

The public health sector must now engage in reform of the common agricultural policy. Health effects have been neglected despite article 152 in the Amsterdam Treaty saying that public health should be promoted by all EU policies. The ongoing discussions concerning the reform of the fruit and vegetable sector are an opportunity not to be missed.

The resources ploughed into agriculture in developed countries are enormous. The total transfers to agriculture in countries in the Organisation for Economic Cooperation and Development for 2003 amounted to \$350bn (£194bn, €288bn), 7 half of which

#### **Summary points**

Current dietary energy supply is more than sufficient to alleviate starvation worldwide and is forecasted to grow for another 25 years

Agriculture subsidies coupled to production distort the balance between supply and demand, leading to overconsumption and obesity

Overproduction of food in rich countries using trade distorting measures undermines the agricultural sectors in developing countries, hindering the eradication of hunger and poverty

Phasing out of agricultural producer support in developed countries is the first step in the fight against both obesity and hunger

comes from taxpayers and half from consumers. Eliminating all agricultural policy distortions could produce global annual welfare gains up to \$165bn according to the Food and Agriculture Organization because production would move to countries with comparative advantages. <sup>14</sup> The global cost of not eradicating hunger—in terms of conflicts, recurrent emergencies, international crime, the drug trade, terrorism, clandestine migration, and the premature death of those who are hungry—is enormous. <sup>15</sup> To this should be added the cost of environmental damage from agriculture, which might be even higher.

In comparison, the estimated cost for food for the 850 million people who currently are food insecure is \$10.4bn a year, while the annual cost of ensuring sound nutrition and health in developing countries is estimated to be \$70-80bn in addition to the \$136bn currently spent. 15 The official development aid needs for achievement of the millennium development goals have been estimated to be \$135bn for 2006 rising to \$195bn in 2015. 22

#### Two steps towards better health

Phasing out of market support for agricultural producers in developed countries is necessary as a first step in the fight against obesity, poverty, and hunger worldwide. In addition, the money saved in taxes could be used for ensuring sound nutrition and health in developing countries and for reaching the millennium development goals. Agricultural market support paid from taxes can be defended only if the food is undersupplied—that is, if the market fails—which was the case when the common agricultural policy was founded in the late 1950s.

But even if subsidies are phased out, global supplies will probably continue to be higher than "healthy" demand for many years to come. The food industry will fight for its markets and try to expand them. Therefore, as a second step, internationally binding conventions like the one on tobacco are needed. These should include issues such as marketing of energy dense foods, availability to children, labelling, and tax

and price measures, as suggested by Chopra and Darnton-Hill.4 Such conventions will require governments, WHO, and the Food and Agriculture Organization to take a strong role. However, government failures must be corrected before market failures can be tackled. Before we brake, we should take the foot off the gas.

LSE has worked at the National Institute of Public Health in Sweden since 1998. Her main areas of interest are nutrition, physical activity, obesity, policy development, health impact assessment, and agriculture policy. Sources of information are reports from the European Commission, the WHO, OECD, FAO as well as the scientific literature.

Competing interests: None declared.

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### Can I get points for reading this?

Accreditation for learning took a knock last year when the Royal College of General Practitioners took the brave step of abolishing its old system of accrediting learning events or resources-the Postgraduate Education Allowance (PGEA) system. Under the old system GPs gathered points by going to courses or reading, and when they reached their annual points quota-hey presto. There was no formal requirement to do further learning that year. Most GPs did continue learning, but for some there seemed little point. The royal college also thought that a worthwhile learning exercise could easily turn into a worthless points gathering exercise and threw the system out. Under the new system GPs have to undertake a satisfactory amount of learning to pass their annual appraisals. The amount and type of learning is agreed beforehand by appraiser and appraisee.

Some colleges are sticking with their points system, however, and continue to insist that their members gain a set quota of points every year. Are they right? One of the main problems with points is that they can interfere with motivation. You should be learning what you want to learn or what you need to learn, but the temptation is to attend a course that is nearby or that doesn't overlap with your children's holidays just so you can get some points. And what happens when you arrive at the course? Well, you could sit at the front and take notes and ask questions, and get your points at the end of the day. Alternatively, you could sit at the back and fall asleep or sign the register and then go shopping, and still get your points at the end of the day. Under most points systems one hour equals one point. But what if you attend a lecture, and it covers a topic that you already know about? You might not have learnt anything, but you still get your point. Much evidence shows that if you try to do an hour of learning you do most of the learning in the first 15 minutes and in the last five. But, regardless of how much you learn, you still get a point. And points mean prizes, and in this case the prize is staying on the medical register.

Advocates of points systems claim that at least everyone can understand points and that all systems are open to abuse and are ultimately dependent on the learner. They also say that points give doctors something tangible that they can show their employers, and ultimately their patients, to show that they are up to date. Points have their weaknesses, but for many of us they are here to stay. But we shouldn't get too hung up on points; doctors who do are a bit like medical students who keep asking if your lectures are going to come up in their finals-annoying. And can you get points for reading journals or doing online learning? Well you can get any number of personal CPD points for reading journals or doing online learning, and you can count online learning for up to five external CPD points.

At BMJ Learning we try not to get too involved in points-gathering exercises; we think clinical learning is much more interesting. One of our most recent clinical modules is on paracetamol overdose. Some 150-200 deaths occur annually in England and Wales because of paracetamol poisoning,<sup>2</sup> and it is responsible for around half of all cases of acute liver failure in the United Kingdom.3 How best to treat it? Should you eliminate the drug from the stomach with syrup of ipecacuanha, or gastric lavage, or activated charcoal, or none of the above? Would you treat patients any differently if they were also taking drugs such as protease inhibitors or St John's wort? Should you treat pregnant women or children any differently? To find out, have a look on www.bmjlearning.com.

Kieran Walsh clinical editor, BMJ Learning (bmjlearning@bmjgroup.com)

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